Mass General Brigham
Health Plan

Roctavian
(Valoctogene roxaparvovec)

Policy Number: 070

	Commercial and Qualified Health Plans	MassHealth	Medicare Advantage
Authorization Required	X	X	X
No Prior Authorization			

Roctavian is an adeno-associated virus 5 vector-based gene therapy indicated for the treatment of patients with Hemophilia A (congenital Factor VIII deficiency).

Criteria

1. Criteria for Initial Approval
   Authorization of a single treatment may be granted to biologic male (or male assigned at birth) members 18 years of age or older for treatment of severe Hemophilia A (endogenous factor VIII activity ≤1 IU/dL or ≤1% of normal) when **ALL** of the following criteria are met:
   - A. Requires treatment with one of the following:
     - i. Currently use Factor VIII prophylaxis therapy AND has had > 150 previous exposure days of treatment with FVIII protein within their lifetime.
     - ii. Currently use Hemlibra (emicizumab).
   - B. The member is not currently receiving immunosuppressive therapy.
   - C. The member does not have any active malignancies.
   - D. The member has no history of thrombosis or thrombophilia.
   - E. The member has no contraindications to treatment with steroids and / or tacrolimus, or mycophenolate, if needed.
   - F. The member has no history of mannitol hypersensitivity.
   - G. The member has not received Roctavian previously.
   - H. Prescriber attestation of no other bleeding disorders, besides hemophilia A.
   - I. The prescriber must document **ALL** of the following, within 60 days prior to treatment[1]:
     - i. Annualized bleeding rate (ABR)
     - ii. FVIII activity level.
     - iii. FVIII inhibitor level.
     - iv. Neutralizing Antibody to AAV5 by a test that is FDA-authorized for selection of patients for Roctavian therapy.
     - v. Creatinine.
     - vi. AST, ALT, bilirubin, alkaline phosphatase (ALP).
     - vii. Serologic testing for HIV, hepatitis B, and hepatitis C.
     - viii. Weight.
   - J. The member must have no evidence of factor VIII inhibitor at screening, defined as < 0.6 Bethesda units.

[1] Baseline ABR will be documented for the purposes of outcomes monitoring and shall have no bearing on the decision to approve or deny.

i. Individuals with a history of transient VIII inhibitor must document at least 6 months since testing positive, with at least 2 negative VIII inhibitor tests during that period.

K. The member does not have Neutralizing antibody to AAV5.

L. The member has adequate renal function as evidenced by BOTH of the following:
   i. Estimated creatinine clearance of at least 30 mL/min.
   ii. Creatinine ≤ 2 times the upper limit of normal.

M. The member does not have liver function test values (ALT, AST, bilirubin, ALP), greater than 2 times the upper limit of normal or evidence of stage 3-4 cirrhosis determined by hepatic ultrasound and elastography, unless a consulting hepatologist has assessed the member as being eligible to undergo treatment with Roctavian.

N. The member does not have active infection, chronic or active hepatitis B or C, or immunosuppressive disorder including HIV.
   i. If member has had active infection or recent treatment for Hepatitis C, there must be evidence of Hepatitis C eradication following treatment.

2. Dosing and Administration
   - The recommended dose is a single dose, given intravenously, containing 6 x 10^{13} genome copies (gc) per kilogram of body weight. Appropriate dosing should follow the package insert.

3. Duration of Therapy
   - Single treatment course must be given within three months of approval.
   - Additional courses of therapy are considered experimental/investigational.

4. Facility Criteria
   - The medication is prescribed by a hematologist.
   - The treatment will be administered at a Comprehensive Hemophilia Treatment Center

Medicare Variation

Mass General Brigham Health Plan uses guidance from the Centers for Medicare and Medicaid Services (CMS) for coverage determinations for its Medicare Advantage plan members. National Coverage Determinations (NCDs), Local Coverage Determinations (LCDs), Local Coverage Articles (LCAs) and documentation included in the Medicare manuals are the basis for coverage determinations. When there is no guidance from CMS for the requested service, Mass General Brigham Health Plan's medical policies are used for coverage determinations. **At the time of Mass General Brigham Health Plan's most recent policy review, CMS has no NCD or LCD for Roctavian.**

CPT/HCPC Codes

Authorized CPT/HCPCS Codes	Code Description
No specific code	

Effective

December 2023: Effective Date.

References

Ozelo MC, Mahlangu J, Pasi K. et al. GENEr8-1 Trial Group. [PIVOTAL TRIAL] Valoctocogene Roxaparvovec Gene Therapy for Hemophilia A. N Engl J Med. 2022 Mar 17;386(11):1013-1025. doi: 10.1056/NEJMoa2113708. PMID: 35294811.

Mahlangu J, Kaczmarek R, von Drygalski A, et al. GENEr8-1 Trial Group. Two-Year Outcomes of Valoctocogene Roxaparvovec Therapy for Hemophilia A. N Engl J Med. 2023 Feb 23;388(8):694-705. doi: 10.1056/NEJMoa2211075. PMID: 36812433.

Pasi KJ, Laffan M, Rangarajan S, et. al. Persistence of haemostatic response following gene therapy w/ valoctocogene roxaparvovec in severe haemophilia A. Haemophilia. 2021 Nov;27(6):947-956. doi: 10.1111/hae.14391. Epub 2021 Aug 11. PMID: 34378280; PMCID: PMC9291073.

Pasi KJ, Rangarajan S, Mitchell N, et al. Multiyear Follow-up of AAV5-hFVIII-SQ Gene Therapy for Hemophilia A. N Engl J Med. 2020 Jan 2;382(1):29-40. doi: 10.1056/NEJMoa1908490. PMID: 31893514.

Rangarajan S, Walsh L, Lester W, et al. AAV5-Factor VIII Gene Transfer in Severe Hemophilia A. N Engl J Med. 2017 Dec 28;377(26):2519-2530. doi: 10.1056/NEJMoa1708483. Epub 2017 Dec 9. PMID: 29224506.

Roctavian [package insert]. Novato, CA: Biomarin Pharmaceuticals Inc, June 2023.

WFH Treatment Guidelines 3ed_Chapter 2 Comprehensive care of hemophilia